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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,410	07/01/2003	Shuji Nakamura	160-386	9450
23117	7590	10/20/2004	EXAMINER	
NIXON & VANDERHYE, PC			ROCCHEGIANI, RENZO	
1100 N GLEBE ROAD			ART UNIT	PAPER NUMBER
8TH FLOOR			2825	
ARLINGTON, VA 22201-4714			DATE MAILED: 10/20/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/609,410	NAKAMURA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Renzo N. Rocchegiani	2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

#### A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 29 July 2004.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 58-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 58-62 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/01/2003.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 58-62 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Reissued Patent No. 36,747 (Manabe et al.).

Manabe et al. disclose a GaN based compound semiconductor light-emitting device comprising a semiconductor stacked structure including an n-type GaN layer and a p-type GaN semiconductor layer, a nickel electrode (thus a light transmitting electrode) over the p-type GaN layer, an aluminum bonding pad electrode (thus a more strongly bonded electrode) on the p-type GaN layer and in the cut-off portion of the first electrode. (See Fig. 4B) The first electrode has a thickness of 100-1000 angstroms. (col. 5, lines 45-55).

### ***Response to Arguments***

3. Applicant's arguments filed on July 29, 2004 have been fully considered but they are not persuasive. Applicant argues that the prior art does not anticipate the claimed invention because it does not consider the second electrode a bonding pad. Looking at the Manabe et al. reference, the examiner does not see how items 7 and 8 cannot be

called bonding electrodes. Applicant suggests that to be a bonding electrode the second electrode must be smaller than the first electrode. The examiner disagrees with this point because nothing in the claim language states that the bonding electrode must be of a different size. Thus this argument is not deemed to be persuasive. Applicant further argues that the prior art does not teach the first electrode to be light-transmitting, yet the prior art uses the same material that applicant uses to form this electrode thus this property is inherent. The third and final argument raised by applicant is that the prior art does not teach a p-type GaN layer, instead the prior art teaches a p-doped GaN layer. The examiner is of the position that if a GaN layer is doped with p-type impurities, then the GaN layer is a p-type layer. For the foregoing reasons the arguments presented by applicant are not deemed to be persuasive. The rejection stands as modified to include the newly added claims that are also anticipated.

Applicant is reminded that still not all of the references listed in the IDS have been considered, please see the attached copy of the initialed IDS to see which documents have been struck out.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renzo N. Rocchegiani whose telephone number is (571)272-1904. The examiner can normally be reached on Mon.-Fri. 8:00 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on (571)272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Renzo N. Rocchegiani  
Examiner  
Art Unit 2825

  
MATTHEW SMITH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800